

CLAIMS

What is claimed is:

1. A method for handling attributes in a document management system comprising the steps of:
 - (a) defining at least one child index class, the at least one child index contains at least one additional real attribute; and
 - (b) defining at least one corresponding parent index class, the at least one corresponding parent index class contains the at least one additional real attribute as a virtual attribute.
2. The method of claim 1 which includes the step of (c), searching for the virtual attribute.
3. The method of claim 2, wherein the searching step (c) further comprises the steps of:
 - (c1) searching the at least one child index class for a real attribute related to the virtual attribute;
 - (c2) obtaining the corresponding parent index class for each search hit in the at least one child index class;
 - (c3) building a list of the obtained parent index classes; and
 - (c4) returning the list of parent index classes with the virtual attribute.
4. A method for handling attributes in a document management system

2 comprising the steps of:

3 (a) defining a document index class having a plurality of attributes; and

4 (b) defining a folder index class having one attribute.

1 5. The method of claim 4 which includes the step of (c) presenting the plurality
2 of attributes of the document class based upon step (b).

1 6. The method of claim 3, wherein the presenting step (c) further comprises the
2 steps of:

- 3 (c1) obtaining all parent folders corresponding to the folder index class;
4 (c2) obtaining an attribute and appending the attribute to a list for each obtained
5 folder; and
6 (c3) obtaining single-valued attributes of the document and returning the single-
7 valued attributes to the list.

1 7. A document management system comprising:
2 a document management interface, the document management interface including a
3 dynamic document description for definition of virtual and/or extended attributes and a first
4 search engine; and
5 a content management system coupled to the document management interface, the
6 content management system including a static document description and a second search
7 engine.

1 8. The system of claim 7, wherein the document management interface also
2 translates translating a search request into a number of document management system
3 requests that can be utilized by the content management system.

1 9. The system of claim 7 in which the document management interface also
2 defines at least one child index class, the at least one child index contains at least one
3 additional real attribute, and defines at least one corresponding parent index class, the at
4 least one corresponding parent index class contains the at least one additional real attribute
5 as a virtual attribute.

1 10. The system of claim 9 which the document management interface also
2 searches for the virtual attribute.

1 11. The system of claim 10, wherein the document management interface
2 searches the at least one child index class for a real attribute related to the virtual attribute,
3 obtains the corresponding parent index class for each search hit in the at least one child
4 index class, builds a list of the obtained parent index classes, and returns the list of parent
5 index classes with the virtual attribute.

1 12. The system of claim 7 in which the document management interface
2 also defines a document index class having a plurality of attributes, and defines a
3 folder index class having one attribute.

1 13. The system of claim 12 in which the document management interface also
2 presents the plurality of attributes of the document class based upon the folder index class
3 defining means.

1 14. The system of claim 13, wherein the document management interface
2 obtains all parent folders corresponding to the folder index class obtains an attribute
3 and appending the attribute to a list for each obtained folder; and obtains single-
4 valued attributes of the document and returning the single-valued attributes to the
5 list.

1 15. A computer readable medium containing program instructions for handling
2 attributes in a document management system, the program instructions for:

3 (a) defining at least one child index class, the at least one child index contains at
4 least one additional real attribute; and

5 (b) defining at least one corresponding parent index class, the at least one
6 corresponding parent index class contains the at least one additional real attribute as a virtual
7 attribute.

1 16. The computer readable medium of claim 15 which includes program
2 instructions for the virtual attribute.

1 17. The computer readable medium of claim 16, wherein the searching step (c)
2 further comprises the steps of:

3 (c1) searching the at least one child index class for a real attribute related to the
4 virtual attribute;

5 (c2) obtaining the corresponding parent index class for each search hit in the at
6 least one child index class;

7 (c3) building a list of the obtained parent index classes; and

8 (c4) returning the list of parent index classes with the virtual attribute.

1 18. A computer readable medium containing program instructions for handling
2 attributes in a document management, the program instructions for:

3 (a) defining a document index class having a plurality of attributes; and

4 (b) defining a folder index class having one attribute.

1 19. The computer readable medium of claim 18 which includes program
2 instructions for presenting the plurality of attributes of the document class based upon step
3 (b).

1 20. The computer readable medium of claim 19, wherein the presenting step (c)
2 further comprises the steps of:

3 (c1) obtaining all parent folders corresponding to the folder index class;

4 (c2) obtaining an attribute and appending the attribute to a list for each obtained
5 folder; and

6 (c3) obtaining single-valued attributes of the document and returning the single-
7 valued attributes to the list.